

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of  
Framework for Broadband  
Industry Service

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GN Docket No. 10-127

**REPLY COMMENTS  
OF LEVEL 3 COMMUNICATIONS, LLC**

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Level 3 Communications, LLC (“Level 3”) submits these reply comments in response to the Notice of Inquiry (“NOI”) from the Federal Communications Commission (“Commission”) relating to the reclassification of broadband Internet services.

**I. EXECUTIVE SUMMARY**

In the NOI, the Commission asks whether a “Third Way” approach to Internet regulation – which would reclassify a subset of broadband Internet services as “telecommunications services” under Title II of the 1996 Telecommunications Act – would provide it with clear authority to carry out the objectives of the National Broadband Plan. Faced with what it perceives as limitations on its jurisdiction over broadband Internet services stemming from the *Comcast*<sup>1</sup> decision, the Commission is trying to find a jurisdictional lynchpin for carrying out its objectives regarding broadband Internet services.

Level 3 believes that the government has a role to play in assuring an open, dynamic, innovative and ubiquitous broadband Internet. The Company shares the Commission’s view that government must preserve innovation, advance policies that encourage accelerated investment in broadband infrastructure, and protect competition within all portions of the

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<sup>1</sup> *Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. Cir. 2010) (*Comcast*)

Internet market. It is not clear to Level 3 that the “Third Way” approach of reclassification and forbearance can satisfy these objectives. The foundation for Level 3’s concern about the “Third Way” is simple: Will the extension of Title II regulation reach, as AT&T warns, all “IP-based communications through the Internet backbone to all points on the Internet”?<sup>2</sup>

Level 3 appreciates that the Commission’s Third Way proposal is not *intended* to reach that far. But the practical, definitional difficulties will be daunting when trying to limit reclassification to only parts of the Internet infrastructure. Providers within the industry may not be able to clearly determine the scope of the initial Title II reclassification, and may not be able to rely on the permanence and stability of the Commission’s planned statutory forbearance.

These regulatory uncertainties, if uncorrected in an eventual rulemaking, would leave carriers in regulatory limbo, wondering whether all or some component(s) of their service offerings are subject to various provisions of Title II. If applied to competitive Internet services, that uncertainty has the potential to negatively impact competition, investment and innovation in the Internet.

## **II. PARTIAL RECLASSIFICATION INVOLVES DIFFICULT LINE DRAWING**

The Commission proposes that under the “Third Way” reclassification plan, Title II obligations will not apply to “Internet backbone” services or to content delivery network services (“CDN Services”). Exempting these types of service from Title II is an objective Level 3 supports, as robust competition within the market has eliminated the need for regulation. However, the challenge to clearly and accurately define what services are reclassified and what services remain outside the scope of Title II may be insurmountable.

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<sup>2</sup> *In the Matter of Framework for Broadband Industry Service*, GN Docket No. 10-127, Comments of AT&T, p. 8 (filed July 15, 2010) (*AT&T Comments*)

Carriers within the Internet do not routinely classify their services as “backbone service.” Level 3 offers high-speed IP services that might be delivered over some combination of long-haul, middle mile and “last-mile” network assets. Our customers include business enterprises seeking access to private data or Internet content and applications, as well as content and applications customers seeking to offer their products and services over the Internet. The market hasn’t needed to characterize that service as “backbone,” “local,” “access” or “long distance” as those distinctions have no bearing on the terms of the service provided. It is practically impossible to determine whether these services, in whole or in part, meet the definition of “backbone services.”

Extracting CDN Services from the scope of Title II obligations is equally challenging. Any effort to define the CDN Services that are exempt from Title II regulation will be challenging given the pace of innovation in the market. “CDN Service” architecture is evolving. Adopting a regime where changes in architecture or technology could result in a change in regulation could chill the innovation that has been the primary catalyst for the growth of the Internet to date.

Even the most vocal supporters of the “Third Way” offer little meaningful help in defining what services, precisely, would be exempt from Title II regulation.<sup>3</sup> Public Knowledge focuses its arguments on the need for regulation of “a facility that connects an end user to the Internet.” Level 3’s high-speed IP service appears to meet that definition, even though a large portion of the service might be delivered over what could be categorized as a “backbone.” On the surface Public Knowledge’s proposed definition is simple, but when applied to the actual delivery of services it opens the door for extending Title II obligations

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<sup>3</sup>See: *In the Matter of Framework for Broadband Industry Service*, GN Docket No. 10-127, Comments of Free Press (Free Press Comments) and *In the Matter of Framework for Broadband Industry Service*, GN Docket No. 10-127, Comments of Public Knowledge (filed July 15, 2010) (*Public Knowledge Comments*)

to *all* services (including CDN Services and services delivered over a “backbone”) used to deliver broadband Internet capabilities.

Free Press hypothesizes that backbone transmission providers may not be telecommunications carriers if they do not “offer data transmission to and from points of a user’s choosing ‘directly to the public, or to such classes of users as to be effectively available directly to the public.’”<sup>4</sup> That exception, however, is at odds with the advocacy by Free Press for end-to-end regulation and its recognition that peering arrangements and multiple networks are often involved in providing the end-to-end service that Free Press wants the FCC regulate.<sup>5</sup> Having placed these conflicting notions in front of the Commission and unable to reconcile them, Free Press waffles and concludes that “the Commission need not resolve that question in this proceeding.”<sup>6</sup> This contradiction reveals that the proposed regulation embraced by Free Press is not as “minimalist” as it preaches. In what will become a futile exercise in a regulatory line drawing across a disaggregated communications infrastructure, neither Free Press nor the Commission can ignore the need to clearly delineate where the regulation of “broadband connectivity service” begins and where it ends.

At its core, Free Press would have the FCC adopt a “broad, functional definition for broadband connectivity that focuses on the sending and receiving of IP data packets from end to end on the network of networks known as the Internet,” which in Free Press’s view include wireless networks.<sup>7</sup> Under this definition, neither Internet “backbone services” (if we could define them) nor CDN Services could be exempted from regulation under Title II since both services perform the exact function that Free Press describes.

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<sup>4</sup>Free Press Comments, p. 50, quoting 47 U.S.C. § 153(46).

<sup>5</sup> Free Press Comments, p. 50

<sup>6</sup> *Id.*

<sup>7</sup> *Id.* at 3

It was easier in the day of a single network provider to draw lines around where services began and terminated. It was easier to develop arbitrary cost recovery mechanisms and build the cost of social policy goals into the rate base. But that's not today's interconnected world. AT&T is correct when it says that the "Internet is not a single network, much less a public utility. It is instead a loose, global confederation of thousands upon thousands of networks, most of them built and operated with private, risk capital with no guaranteed returns. .... The Internet, as that term is commonly used, is a '*conceptual aggregation*' of these mostly private IP-based networks spread across the world."<sup>8</sup> While it is true that a "backbone network" is considered to be highest-capacity portion of a network operator's facilities that cross long distances,<sup>9</sup> Level 3 cautions the Commission to avoid using "capacity" in the Internet infrastructure to determine regulatory treatment of services. Some carriers operate networks with a maximum capacity of OC-192, whereas others may deploy OC-48 (or less). Basing a service's regulatory classification on deployed capacity in the core of the Internet is not wise policy.

In addition to the variations in the capacity of networks, it does not necessarily follow that backbone operators will only interconnect for peering or transit purposes at their "highest level of capacity." Companies make IP interconnection determinations based on technical, engineering and economic principles and not based on arbitrary regulatory requirements like any Title II obligations.

Verizon is correct to raise concerns about the impact of "Third Way" regulation on the Internet. Level 3 agrees with Verizon that the range of offerings captured by the "Third Way" would include such services as CDN Services and high-speed IP services (such as is

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<sup>8</sup> *AT&T Comments*, p. 48

<sup>9</sup> *Id.*

offered by Level 3.).<sup>10</sup> Level 3 offers the same suite of IP services to large and small business customers (who are seeking to connect to content and applications on the Internet) and to content and application providers (who are seeking to place their products on the Internet where they can be used by residential and business-based Internet subscribers). Regardless of the technology used, the purpose of the service provided is to connect “consumers” to “providers” via the Internet. As Verizon explains, the “Third Way” potentially applies Title II regulation to Internet “backbone” and CDN Services, notwithstanding the Commission’s desire that it would not reclassify these services in the NOI (par. 107)<sup>11</sup>. Level 3 agrees with Verizon that it may be difficult to exempt portions of the service comprising the Internet from Title II obligations.

Cox Communications offers a similar view when it warns the Commission of the unintended consequences of changing a service from an information service to a telecommunications services.<sup>12</sup> The most significant consequence would be that services the Commission has said it does not want to regulate, including core Internet backbone and edge servers, might have to be treated as telecommunications services subject to Title II. Cox is correct that statutory definitions are mandatory and the Commission cannot make a policy decision to avoid its statutory obligations.

While Level 3 does not believe that the FCC must embark on its “Third Way” at this time, it does agree with Sprint that, if the Commission proceeds, network functions such as security and caching, network monitoring, capacity engineering and management, fault management and troubleshooting should be expressly excluded from regulation. Level 3 also agrees that the following functions identified in the NOI should be excluded from Title II

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<sup>10</sup> *In the Matter of Framework for Broadband Industry Service, GN Docket No. 10-127, Comments of Verizon*, p. 61 (filed July 15, 2010) (*Verizon Comments*)

<sup>11</sup> *See Verizon Comments*, p. 45, p. 58 - 63

<sup>12</sup> *In the Matter of Framework for Broadband Industry Service, GN Docket No. 10-127, Comments of Cox Communications*, p. 21-22 (filed July 15, 2010) (*Cox Comments*)

regulation: email hosting, web-based content and applications, voicemail, interactive menu services, video conferencing, cloud computing and services not sold by facilities based ISPs to end users in the retail market. If the Commission does proceed, it should focus its attention on those services where Title II protections might (because of limited competitive alternatives) arguably be needed most: consumer retail Internet service.<sup>13</sup>

Equipment manufacturers have also joined the chorus of parties who are concerned about extension of Title II regulation to the undefined Internet “backbone.” While unable to define it, Alcatel-Lucent urges the FCC not to interfere with the Internet backbone by separating the enhanced services from the basic transmission component. Alcatel-Lucent warns that “[s]uch a regulatory separation, which may rely on the separate transmission component in the NECA tariff or IETF Layers as proxies, fails to recognize how the broadband marketplace continues to evolve with transmission and enhanced capabilities even more integrated and intertwined today than they were back in 1998 when the Commission first took up the classification of Internet service as an Information Service.”<sup>14</sup>

Alcatel-Lucent shows how difficult it would be to prevent regulation from interfering with other functions provided over the backbone. The use of a broadband access connection between an enterprise and a data center could pull “cloud computing” into the realm of Title II regulation.<sup>15</sup> That would be an ironic outcome since the initial information services classification was created to encourage access to computing networks over the PSTN.

Cisco is also dubious about any attempt to regulate the Internet. It fundamentally rejects the FCC’s premise that broadband Internet service is not an integrated information

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<sup>13</sup> *In the Matter of Framework for Broadband Industry Service*, GN Docket No. 10-127, Comments of Sprint Nextel, p. 15-16 (filed July 15, 2010) (*Sprint Nextel Comments*)

<sup>14</sup> *In the Matter of Framework for Broadband Industry Service*, GN Docket No. 10-127, Comments of Alcatel-Lucent, p. 2 (filed July 15, 2010) (*Alcatel-Lucent Comments*)

<sup>15</sup> *Id.* at 4

service, “but rather the joint provision of two separate offerings: (1) an information service that rides over (2) a common-carrier transmission offering.”<sup>16</sup>

In addition to concerns about the Internet backbone, Level 3 shares the view of Alcatel-Lucent over the extension of Title II regulation to content delivery networks. The “Third Way,” warns Alcatel-Lucent, could distort technology choices and engineering decisions of content providers who must now comply with a government mandate instead of what makes the most technological sense. It could also interfere with a voice or video providers’ ability to allow for customer-controlled, application-specific quality of service. As Alcatel-Lucent explains:

“For example, with Applications Enablement a user can enable an Application/Content Provider (“ACP”) video or voice provider to call out certain enhanced network capabilities from the broadband ISP to provide the quality and reliability required for video performance and demanded by consumers. For an ACP voice or video communications provider to provide a high quality experience to the end user, prioritization of the packets is required in order to avoid delay of packet delivery and/or jitter. In the absence of this treatment quality degradation occurs during congestion at points in the network as packets are dropped because they do not arrive at the receiver in time to be decoded and played out. With the advent of open APIs into the network, these problems can now be overcome as the session can request the necessary QoS treatment to deliver the quality service the end user desires. In practice, this would typically take the form of remarking the priority bits in the IP header (layer 3 in the OSI model), but could also include the addition of sequence numbers by the network provider (at layer 4 or 5 in the OSI model) to facilitate re-transmission of dropped packets.”<sup>17</sup>

This example reflects on the plethora of technological and quality of service issues that the Commission will be called upon to resolve if it adopts its proposed “Third Way” solution.

Like AT&T, Level 3 agrees with how the Commission characterized the Internet industry in the Stevens Report when it wrote, “the technology and market conditions relating to the Internet backbone are unusually fluid and fast-moving, and we are reluctant to impose any regulatory mandate that relies on the persistence of a particular market model or market

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<sup>16</sup> *In the Matter of Framework for Broadband Industry Service*, GN Docket No. 10-127, Comments of Cisco Systems, Inc. p. 5 (filed July 15, 2010) (*Cisco Comments*)

<sup>17</sup> (*Alcatel-Lucent Comments* at p. 4)

structure.” The FCC was right to go down that path because inherent in any government mandate is that government rate setting is not far behind. Level 3 moved from the drawing board to one of the world’s largest Internet networks exactly because it was able to respond to market and technology dynamics without having to meet any government imposed mandates. The extension of any Title II regulation into the core of the Internet harms innovation, dampen investment and hurt competitive development.

### **III. THE THIRD WAY’S FORBEARANCE PLAN CREATES UNCERTAINTY**

A crucial but inadequately defined component of the “Third Way” is for the Commission to forbear from most provisions of Title II of the Communications Act of 1934 as amended by the Telecommunications Act of 1996. In the NOI, the Commission expressly identifies Sections 201, 202, 208, 254, and 255 that it would enforce. As the comments show, the plan to extend Title II regulation has parties angling to broaden the scope of regulation beyond the FCC’s expressed intent.

Extending Sections 201 and 202 to “broadband services” (including those services where robust competition undeniably exists) imposes a variety of new obligations on carriers. Questions about terms and conditions for interconnection could easily come before the Commission under Section 201(a). Questions relating to pricing for competitively offered high-speed IP (including differential pricing based on routes or capacity) could be brought to the Commission under Section 201(b) or 202. Yet the Commisison seeks to impose these obligations (potentially even on carriers in admittedly competitive markets) without an adequate record of failure in the broadband markets under Title I.

At present, if potential customers for Level 3’s service believe that pricing is unreasonable, they will purchase from competitors. Imposition of Section 201 and 202 obligations on competitive providers like Level 3 will stunt arms-length commercial

negotiations. Internet innovation has not been limited to equipment and fiber; companies within the industry have been creative with respect to the terms and conditions under which they provide service – some of these innovations have been successful, and others not. With potentially ubiquitous application of Sections 201 and 202, carriers will be reluctant to adopt creative pricing regimes, creative service architectures or other potentially beneficial “one-off” commercial arrangements for fear that others will be able to *compel* similar transactions in the future. If that occurs, innovation will be slowed as parties default to the legal process, and competition will become mired in legal battles fought before commissions and not in the marketplace.

Despite the Commission’s earlier statements that it would focus on the sections of Title II listed above, some commentators have argued that additional provisions of Title II should remain applicable to reclassified services. PaeTec, for example, argues that § 251 (a) and (c) (together with the related § 252 provisions), § 256 and § 271 should be applicable to broadband Internet services.<sup>18</sup> The Commission should decline this invitation because absent a broader record and a complete understanding of the impacts of such an action, the Commission should not divert from the path outlined in the NOI. Level 3 will discuss in Section V why it is also not appropriate to extend IP interconnection rights through this NOI.

#### **IV. THE UNINTENDED CONSEQUENCES OF RECLASSIFICATION MUST BE CONSIDERED**

Since the passage of the Telecommunication Act of 1996, communications providers have relied upon the different regulatory regimes for information and telecommunication services when structuring their business plans. Those decisions were based on a regulatory regime that had been fixed for more than a decade. With the path outlined in the “Third Way”, the FCC runs the risk of upending those business plans and creating a tidal wave of

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<sup>18</sup> (*In the Matter of Framework for Broadband Industry Service*, GN Docket No. 10-127, Comments of PAETEC Holding Corp. p. 9 (filed July 15, 2010) (*PAETEC Comments*))

new disputes between government agencies and communications companies. No matter how far the FCC believes it can forbear from certain obligations, reclassification from information to telecommunications services will have far reaching impact.

Charter is correct to caution the Commission that reclassification would disturb the taxation regulatory regimes despite forbearance claims to the contrary.<sup>19</sup> Reclassification invites massive new state property taxes and local franchising obligations on newly classified "telecommunications" facilities and services over which the Commission may have far less jurisdictional control.<sup>20</sup> States impose taxes on utility property (including telecommunications) on a central assessment basis, while non-telecommunications property (like cable and broadband) is taxed on a local assessment basis, which typically results in a much lower tax burden. Level 3 agrees with Charter that if broadband is reclassified as telecommunications subject to Title II, states could arguably tax broadband networks in their state as telecommunications on a central assessment basis, resulting in an estimated increase in property taxes.

Level 3 is also concerned that reclassification could expose broadband providers to municipal regulations of local rights-of-way, including franchise obligations and fees. The question of "just and reasonable" fees for local and municipal rights of way are a hotly contested issue before Commission through Level 3's *Petition for Declaratory Ruling that Certain Right-of-Way Rents Imposed by the New York State Thruway Authority are Preempted under Section 253*.<sup>21</sup> A decision by the FCC to impose Title II regulation on broadband services, including Internet backbone networks, will only increase the number tax and franchise disputes, diverting resources from expansion of broadband networks. And the

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<sup>19</sup> *In the Matter of Framework for Broadband Industry Service*, GN Docket No. 10-127, Comments of Charter Communications, p. 6-7 (filed July 15, 2010) (*Charter Comments*)

<sup>20</sup> *Id.* at 7.

<sup>21</sup> See: WC Docket No. 09-153

Commission should remember that any increased tax load will be passed through to the retail end users through high prices and fees.

## **V. THE COMMISSION SHOULD NOT ADDRESS IP INTERCONNECTION IN THE CONTEXT OF THIS PROCEEDING**

In an argument that should be a yellow flag to the Commission, Sprint argues that the adoption of a “Third Way” regulatory regime will require the Commission to clarify the rights and obligations regarding interconnection in order for carriers to exchange traffic in IP format at technically feasible locations not confined to ILEC calling areas or LATAs.<sup>22</sup> While Level 3 is a proponent of shifting to an IP interconnection regime, it would be premature to make such a declaration in this proceeding in large part because Sprint’s Recommendation 4.10 draws on other policy issues including intercarrier compensation and universal service reform.

Level 3 also believes that Recommendation 4.10 could be confused to actually require interconnection obligations on the Internet “backbone” even though Sprint has pointed out that the FCC will exclude those services that a facilities-based ISP does not sell to retail end users. Carriers do not traditionally offer interconnection, IP or otherwise, to retail end users which raises the question of whether Sprint’s objective would be met regarding IP to PSTN interconnection. Level 3 is concerned that without a better understanding of the issue and a more detailed record, the Commission should decline Sprint’s invitation to extend IP interconnection rights at this time.

Level 3 does agree, however, with Sprint that the failure to reform intercarrier compensation is stunting the deployment of broadband facilities. Instead of spending money on expanding broadband infrastructure and ensuring that end users have sufficient capacity, carriers are deploying resources to litigate the question of what is owed for the origination

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<sup>22</sup> *Sprint Nextel Comments* at 9-10.

and termination of traffic. These per minute of use charges are sending the wrong signals to the market to continue to reinvest in a dying and obsolete public switched telephone network. The sooner the industry is freed from that cycle, the sooner it can direct more attention to meeting the nation's goal of stimulating investment, preserving competition and driving innovation in broadband networks.

## **VI. CONCLUSION**

Level 3 believes that the government has a role to play in assuring an open, dynamic, innovative and ubiquitous broadband Internet. The Company shares the Commission's view that government must preserve innovation, advance policies that encourage accelerated investment in broadband infrastructure, and protect competition within all portions of the Internet market. It is not clear to Level 3, and to many parties that filed comments, that the "Third Way" approach of reclassification and forbearance can satisfy these objectives. Level 3 urges the Commission to proceed with caution and only after careful consideration of any unintended consequences.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Wm. P. Hunt III", followed by the number "30".

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